

[11] Unexamined Japanese Utility Model Publication No. H2-103640

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[54] Title of the Device: Air conditioning ventilating fan

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[What is claimed is:]

1. An air conditioning ventilating fan comprising, in a shell having an internal side suction port and an internal side discharge port communicating with the inside of the room as well as an external side suction port and an external side discharge port communicating with the outside of the room;

an exhaust air channel connecting between said internal side suction port and external side discharge port, and having an exhaust impeller and an electric motor;

a feed air channel connecting between said external side suction port and internal side discharge port, and having a feed air impeller and an electric motor;

a partition board disposed in such a way that said exhaust air channel and said feed air channel may cross each other partially but be isolated from each other in other parts;

a heat exchanger at the crossing portion of said exhaust channel and said feed air channel; and

a damper, at the inlet of the feed air channel of said heat exchanger, for opening the feed air channel by deflecting when the temperature of the external air is high, and partially closing the feed air channel by extending when the temperature of the external air is low.

2. An air conditioning ventilating fan of claim 1, wherein the damper is formed with a shape memorizing resin.

[Brief Description of the Drawings]

Fig. 1 and Fig. 2 indicate the air conditioning ventilating fan according to an exemplary embodiment of the present device, Fig. 1 being a sectional view in the state in which the damper is extended, and Fig. 2 a sectional view in the state in which the damper is deflected. Fig. 3 is a perspective view of the heat exchanger of the air conditioning ventilating fan above. Fig. 4 is a sectional view of a conventional air conditioning ventilating fan. Fig. 5 is a perspective view of the

heat exchanger of the conventional air conditioning ventilating fan.

[Reference Marks]

- 1. Shell
- 2: Internal side suction port
- 3: Exhaust impeller
- 4: Electric motor
- 5: Heat exchanger
- 6: External side discharge port
- 9: Partition board
- 10: Damper
- 13: External side suction port
- 14: Feed air impeller
- 15: Internal side discharge port

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⑭ 考案の名称 空調換気扇

⑰ 実 願 平1-9998

⑱ 出 願 平1(1989)1月31日

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㉒ 実用新案登録請求の範囲

(1) 室内と連通する室内側吸込み口および室内側吐出口と室外と連通する室外側吸込み口および室外側吐出口を有する外かく内に、前記室内側吸込み口と室外側吐出口を結び、排気用羽根と電動機を設けた排気用通路と、前記室外側吸込み口と室内側吐出口とを結び、給気用羽根と電動機を設けた給気用通路とを一部は交差し他の部分は互いに区画されるように仕切り板を配設し、前記排気用通路と給気用通路が交差する部分に熱交換器を設け、前記熱交換器の給気用通路の入口に、室外空気が高温時には屈折して給気用通路を開放し、低温時には展伸して給気用通路を一部閉鎖するダンパを有する空調換気扇。

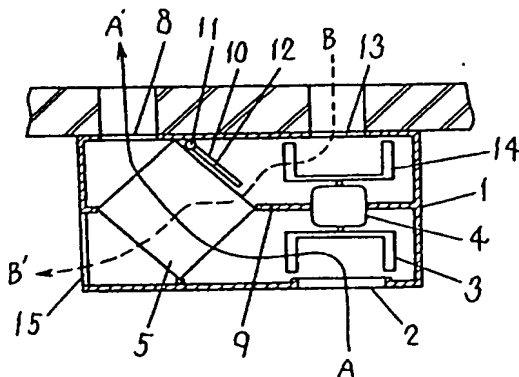
(2) ダンパは形状記憶樹脂で形成した請求項1記載の空調換気扇。

図面の簡単な説明

第1図および第2図は本考案の一実施例の空調換気扇を示し、第1図はダンパ展伸状態の断面図、第2図はダンパ屈折状態の断面図、第3図は同空調換気扇の熱交換器の斜視図、第4図は従来の空調換気扇の断面図、第5図は同空調換気扇の熱交換器の斜視図である。

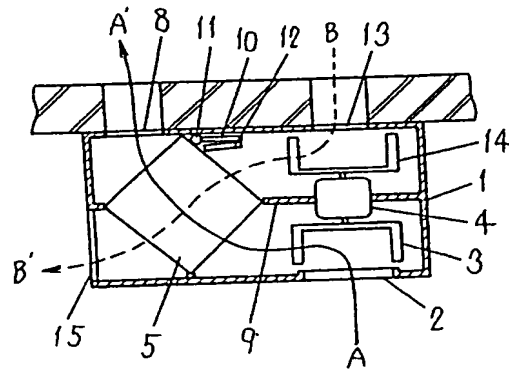
1……外かく、2……室内側吸込み口、3……排気用羽根、4……電動機、5……熱交換器、8……室外側吐出口、9……仕切り板、10……ダンパ、13……室外側吸込み口、14……給気用羽根、15……室内側吐出口。

第 1 図

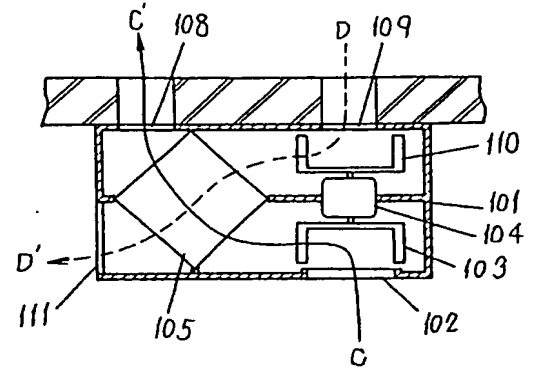


- 1 --- 外かく
- 2 --- 室内側吸込み口
- 3 --- 排気用羽根
- 4 --- 電動機
- 5 --- 熱交換器
- 8 --- 室外側吐出口
- 9 --- 仕切り板
- 10 --- ダンパ
- 13 --- 室外側吸込み口
- 14 --- 給気用羽根
- 15 --- 室内側吐出口

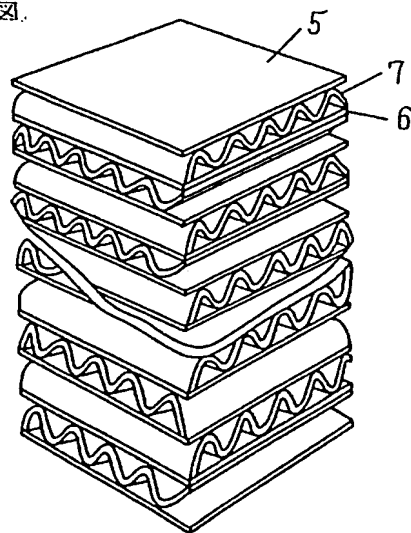
第 2 図



第 4 図



第 3 図



第 5 図

